BRUHUT BANGALURU MAHANAGARA PALIKE

NAME OF WORK: Improvements to roads and drains at Kuvempunagar 1st Stage and surrounding areas in ward no.11 in Kuvempunagar

2019

DETAILED ESTIMATE

SUBMITTED TO B.B.M.P, BANGALORE

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Improvements to roads and drains at Kuvempunagar 1st Stage and surrounding areas in ward no.11 in Kuvempunagar

								Estimation Cost.Rs	**9900000.00**
Sl No	**Description of work**		**Mesurement**				**Qty**	**Rate**	**Amount**
		Unit	**No.**	**L**	**B**	**D**			
1	KSRRB 300-1. **Earthwork excavation by manual means for roads,** drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(P.No-143 &136 ,I No-19.1&17.4& 17.1) 5km lead= 57+2.0x1.28x5 =69.80								
	Drain Desilt								
	2nd Cross Road	Cum	2	55.90	0.60	0.50	33.54		
	3rd Cross Road Tippu Sultan Road	Cum	2	65.30	0.60	0.50	39.18		
	4th Cross Road (TP Kailasm Road)	Cum	2	67.30	0.60	0.50	40.38		
	4th Cross (TP Kailasm Opp Road)	Cum	1	32.70	0.60	0.50	9.81		
		Cum	1	20.70	0.60	0.50	6.21		
	For Flagging Course								
	2nd Cross Road	Cum	2	55.90	0.30	0.40	13.42		
	3rd Cross Road Tippu Sultan Road	Cum	2	65.30	0.30	0.40	15.67		
	4th Cross Road (TP Kailasm Road)	Cum	2	67.30	0.30	0.40	16.15		
	4th Cross (TP Kailasm Opp Road)	Cum	1	32.70	0.30	0.40	3.92		
		Cum	1	20.70	0.30	0.40	2.48		
	For New Drain								
	Church Road (9th Cross Road)	Cum	2	60.00	1.05	0.90	113.40		
	Government School Road 10th Cross Road	Cum	1	33.20	1.05	0.90	31.37		
	10th cross to Church Road	Cum	1	29.20	1.10	0.90	28.91		
	Basic rate							130.00	
	Area weightage 6%							7.80	
	5Km lead & Lift= 57+(2*1.28*5)							69.80	
	Total						**354.45**	**207.60**	**73584.00**
2	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.27-I.No.5.33)								
	2nd Cross Road	Sqm	2	55.90	1.80		201.24		
	3rd Cross Road Tippu Sultan Road	Sqm	2	65.30	1.80		235.08		
	4th Cross Road (TP Kailasm Road)	Sqm	2	67.30	1.80		242.28		
	4th Cross (TP Kailasm Opp Road)	Sqm	1	32.70	1.80		58.86		
		Sqm	1	20.70	1.80		37.26		
						Sub Total	774.72		
	Consider 30% Missing or Damaged Slab						**232.42**		
	Basic rate							105.00	
	Area weightage 6%							6.30	
	Total						**542.30**	**111.30**	**60359.00**

No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
3	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.27,I.No.5.31.1)								
	Consider 30% Missing or Damaged Slab						**232.42**		
	Basic rate							700.00	
	Area weightage 6%							42.00	
	Total						**232.42**	**742.00**	**172453.00**
4	KSRB 4-1.3 : Providing and laying in position plain cement concrete of Mix 1:4:8 with OPC @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2								
	For Flagging Course								
	2nd Cross Road	Cum	2	55.90	0.30	0.15	5.03		
	3rd Cross Road Tippu Sultan Road	Cum	2	65.30	0.30	0.15	5.88		
	4th Cross Road (TP Kailasm Road)	Cum	2	67.30	0.30	0.15	6.06		
	4th Cross (TP Kailasm Opp Road)	Cum	1	32.70	0.30	0.15	1.47		
		Cum	1	20.70	0.30	0.15	0.93		
	For CC Road								
	Sri Manjunath Layout Singapura								
	7th Cross Road	Cum	1	42.20	5.85	0.15	37.03		
	Ashraya Layout 3rd A Cross Connecting								
		Cum	1	60.00	4.40	0.15	39.60		
	Kanaka Bhavana Front Road	Cum	1	101.50	5.00	0.15	76.13		
	Kuvempu Nagar								
	9th Cross Church Road	Cum	1	86.80	5.35	0.15	69.66		
	Nammura Anganavadi Near Church	Cum	1	30.60	6.05	0.15	27.77		
	6th Cross Road (Mariyamma Temple)	Cum	1	34.80	6.90	0.15	36.02		
	Maramma Temple Road	Cum	1	25.30	7.00	0.15	26.57		
	Muniswamappa Layout								
	1st Cross Road	Cum	1	83.00	3.85	0.15	47.89		
	Singapur Layout								
	Cross Road	Cum	1	56.60	4.2	0.15	35.43		
	Singapura								
	KiranDeep Nivas House Road	Cum	1	30.50	4.35	0.15	19.90		
	#13 Surabhi House Road	Cum	1	31.60	3.80	0.15	18.01		
	#120 Ashirvada House Road	Cum	1	65.70	4.20	0.15	41.39		

No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	Deduction								
	Ugd Chamber	Cum	-5	0.44		0.15	-0.33		
				Area of Circle=(3.14X0.75²)/4=0.44					
	-	Cum	-2	0.50		0.15	-0.15		
				Area of Circle=(3.14X0.8²)/4=0.50					
		Cum	-1	1.70	0.6	0.15	-0.15		
		Cum	-1	2.60	6.0	0.15	-2.34		
		Cum	-1	1.30	1.2	0.15	-0.23		
		Cum	-1	2.30	5.5	0.15	-1.90		
	Basic rate							5102.00	
	Area weightage 6%							306.12	
						Total	**489.65**	**5408.12**	**2648104.00**
5	KSRB 5-14: Providing and constructing load bearing wall with solid concrete blocks having block density not less than 1800kg/m3 having a minimum average compressive strength of 4.00 N/mm2 confirming to IS 2185 (Part 1):2005 and constructed with CM 1:4, as per IS 2572:2005 including cost of all materials labour charges, scaffolding, curing, hire charges of machineries etc., complete as per specifications. blocks of size 400x200x200mm KBS No.5.4 (P.No-27,I No-5.26.1)								
	For Flagging Course								
	2nd Cross Road	Sqm	4	55.90		0.60	134.16		
	3rd Cross Road Tippu Sultan Road	Sqm	4	65.30		0.40	104.48		
	4th Cross Road (TP Kailasm Road)	Sqm	4	67.30		0.40	107.68		
	4th Cross (TP Kailasm Opp Road)	Sqm	2	32.70		0.40	26.16		
		Sqm	2	20.70		0.40	16.56		
	Basic rate							962.00	
	Area weightage 6%							57.72	
						Total	**389.04**	**1019.72**	**396712.00**
6	KSRB 4-1.6 ; Providing and laying in position **plain cement concrete of Mix 1:2:4** with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No-13,I No-4.6)								
	For Flagging Course								
	2nd Cross Road	Cum	4	55.90	0.20	0.10	4.47		
	3rd Cross Road Tippu Sultan Road	Cum	4	65.30	0.20	0.10	5.22		
	4th Cross Road (TP Kailasm Road)	Cum	4	67.30	0.20	0.10	5.38		
	4th Cross (TP Kailasm Opp Road)	Cum	2	32.70	0.20	0.10	1.31		
		Cum	2	20.70	0.20	0.10	0.83		
	Basic rate							5422.00	
	Area weightage 6%							325.32	
	Total						**17.22**	**5747.32**	**98946.00**

No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
7	KSRB 4-1.2 : Providing and laying in position plain cement concrete of Mix 1:3:6 with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2								
	New Drain								
	Church Road (9th Cross Road)	Cum	2	60.00	1.05	0.15	18.90		
	Government School Road 10th Cross Road	Cum	1	33.20	1.05	0.15	5.23		
	10th cross to Church Road	Cum	1	29.20	1.10	0.15	4.82		
	Basic rate							5194.00	
	Area weightage 6%							311.64	
						Total	**28.95**	**5505.64**	**159372.00**
8	Providing laying plain/ reinforced cement concrete for side Drains Using M20 nominal mix Concrete with OPC at 300kgs.With 20mm and Down size granite metal coarse aggregate at 0.69cum and fine aggregate at 0.43cum Machne mixed, well compacted for wall and Bottom including centering shuttering,cost of materials,HOM of Machinery,Curing Etc.,Complete Excluding cost of Steel as per morth MORTH specification No. 1500, 1700, 2200. Including Cost of material, Labour, HOM complete as per Specification-WALL & Bottom thickness 15Cm(Item No 37.59.2 page no 271)								
	Bottom Raft								
	Road)	Cum	2	60.00	0.75	0.15	13.50		
	Government School Road 10th Cross Road	Cum	1	33.20	0.75	0.15	3.74		
	10th cross to Church Road	Cum	1	29.20	0.90	0.15	3.94		
	Walls								
	Road)	Cum	4	60.00	0.15	0.60	21.60		
	Government School Road 10th Cross Road	Cum	2	33.20	0.15	0.60	5.98		
	10th cross to Church Road	Cum	2	29.20	0.15	0.60	5.26		
	Basic rate							6670.00	
	Area weightage 6%							400.20	
	Total						**54.01**	**7070.20**	**381855.00**
9	KSRB M2200-6 Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. MORTH Specification NO.1600&2200Specification No. Pg No.229 Item No.28.8.2								
	For Drain	Cum					54.01		
		kg	Steel assumed 70Kg/Cum of Concrete				3780.63		
		tonne					**3.78**		
	Basic rate							68233.00	
	Area weightage 6%							4093.98	
	Total						**3.78**	**72326.98**	**273442.00**
10	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	Drain cover slab								
	2nd Cross Road	Sqm	2	55.90	0.90		100.62		

No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
12	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14,P No-143)								
	Sri Manjunath Layout Singapura								
	7th Cross Road	Cum	1	42.20	5.85	0.10	24.69		
	Ashraya Layout 3rd A Cross Connecting Hosabalu nagar Main road								
		Cum	1	60.00	4.4	0.10	26.40		
	Kanaka Bhavana Front Road	Cum	1	101.50	5.00	0.10	50.75		
	Kuvempu Nagar								
	9th Cross Church Road	Cum	1	86.80	5.35	0.10	46.44		
	Nammura Anganavadi Near Church	Cum	1	30.60	6.05	0.10	18.51		
	6th Cross Road (Mariyamma Temple)	Cum	1	34.80	6.90	0.10	24.01		
	Maramma Temple Road	Cum	1	25.30	7.00	0.10	17.71		
	Muniswamappa Layout								
	1st Cross Road	Cum	1	83.00	3.85	0.10	31.93		
	Singapur Layout								
	Cross Road	Cum	1	56.60	4.2	0.10	23.62		
	Singapura								
	KiranDeep Nivas House Road	Cum	1	30.50	4.35	0.10	13.27		
	#13 Surabhi House Road	Cum	1	31.60	3.80	0.10	12.01		
	#120 Ashirvada House Road	Cum	1	65.70	4.20	0.10	27.59		
	Deduction								
	Ugd Chamber	Cum	-5	0.44		0.10	-0.22		
				Area of Circle=(3.14X0.75²)/4=0.44					
		Cum	-2	0.50		0.10	-0.10		
				Area of Circle=(3.14X0.8²)/4=0.50					
		Cum	-1	1.70	0.60	0.10	-0.10		
		Cum	-1	2.60	6.00	0.10	-1.56		
		Cum	-1	1.30	1.20	0.10	-0.16		
		Cum	-1	2.30	5.50	0.10	-1.27		
	Basic rate							41.00	
	Area weightage 6%							2.46	
	5Km lead= (2*1.28*5)							12.80	
	Total						**313.52**	**56.26**	**17639.00**
13	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications Clause 401 of MORTH V Revision.(I No-20.5,P No-153)								

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	Sri Manjunath Layout Singapura								
	7th Cross Road	Cum	1	42	5.85	0.15	37.03		
	Ashraya Layout 3rd A Cross Connecting Hosabalu nagar Main road								
		Cum	1	60.00	4.40	0.10	26.40		
	Kanaka Bhavana Front Road	Cum	1	101.50	5.00	0.15	76.13		
	Basic rate							1882.00	
	Area weightage 6%							112.92	
	Total						**139.56**	**1994.92**	**278403.00**
14	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, using a grade concrete M30 over a prepared base with OPC coarse aggregate @ 0.69cum fine aggregate @ 0.46cum,coarse and fine aggregate confirming to IS:383-2016,with superplastisiser @3lts confirming to IS9103-2008mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine,and curing including cost of all materials,labour,hire chargedof machines,all lead and lift charges etc., complete as per specifications. - do with OPC at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum Pg No.176Item No.22.6.1									
	Sri Manjunath Layout Singapura								
	7th Cross Road	Cum	1	42.20	5.85	0.15	37.03		
	Ashraya Layout 3rd A Cross Connecting Hosabalu nagar Main road								
		Cum	1	60.00	4.40	0.15	39.60		
	Kanaka Bhavana Front Road	Cum	1	101.50	5.00	0.15	76.13		
	Kuvempu Nagar								
	9th Cross Church Road	Cum	1	86.80	5.35	0.15	69.66		
	Nammura Anganavadi Near Church	Cum	1	30.60	6.05	0.15	27.77		
	6th Cross Road (Mariyamma Temple)	Cum	1	34.80	6.90	0.15	36.02		
	Maramma Temple Road	Cum	1	25.30	7.00	0.15	26.57		
	Muniswamappa Layout								
	1st Cross Road	Cum	1	83.00	3.85	0.15	47.89		
	Singapur Layout								
	Cross Road	Cum	1	56.60	4.2	0.15	35.43		
	Singapura								
	KiranDeep Nivas House Road	Cum	1	30.50	4.35	0.15	19.90		
	#13 Surabhi House Road	Cum	1	31.60	3.80	0.15	18.01		
	#120 Ashirvada House Road	Cum	1	65.70	4.20	0.15	41.39		
	Deduction								
	Ugd Chamber	Cum	-5	0.44		0.15	-0.33		
				Area of Circle=(3.14X0.75²)/4=0.44					
		Cum	-2	0.50		0.15	-0.15		

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
				Area of Circle=(3.14X0.8²)/4=0.50					
		Cum	-1	1.70	0.60	0.15	-0.15		
		Cum	-1	2.60	6.00	0.15	-2.34		
		Cum	-1	1.30	1.20	0.15	-0.23		
		Cum	-1	2.30	5.50	0.15	-1.90		
	Basic rate							4916.00	
	Area weightage 6%							294.96	
	Total						**470.29**	**5210.96**	**2450638.00**
								Grand Total	**8363379.00**
								GST Charges (12% of estimated cost)	**1003606.00**
								For 3+1% KRIDL Charges	**334536.00**
								DPR Charges (1% of estimated cost)	**99000.00**
								Project management And Consultancy Charges(1% of estimated cost)	**99000.00**
								Miscellenious and rounding	**479.00**
								Total Amount	**9900000.00**
									RUPEES NINETY NINE LAKHS ONLY

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2018-2019,Issue rates and Data Rates.

Assistant Engineer

Assistant Executive Engineer

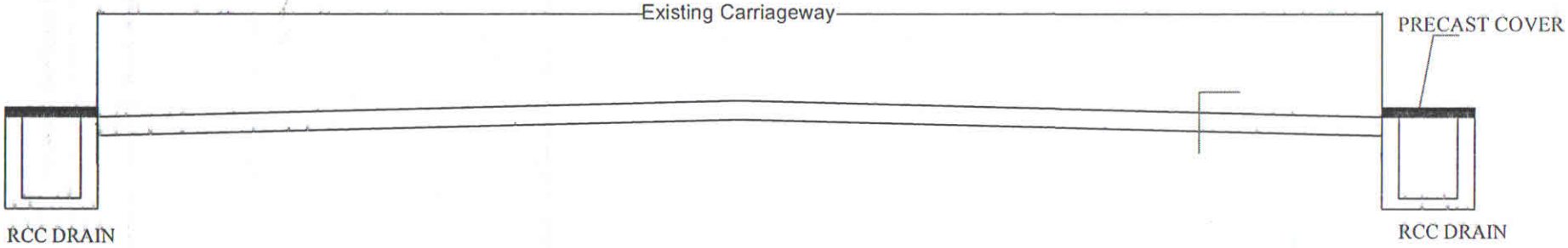
ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division
Bruhath Bengaluru Mahanagara

Executive Engineer
ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ವಿದ್ಯಾರಣ್ಯಪುರ ವಿಭಾಗ
ಬೃ.ಬೆ.ಮ.ಪಾ., ಬೆಂಗಳೂರು

ADMINISTRATIVE APPROVAL
Accorded For Rs. Rs. 99.00 Ninety Nine Lakhs
Head of A/c. P3727, SCSP/TSP.
Div. Ref. No. 60/19-20 Date 24/10/19
AE 24/10
EE(BTP) 24/10

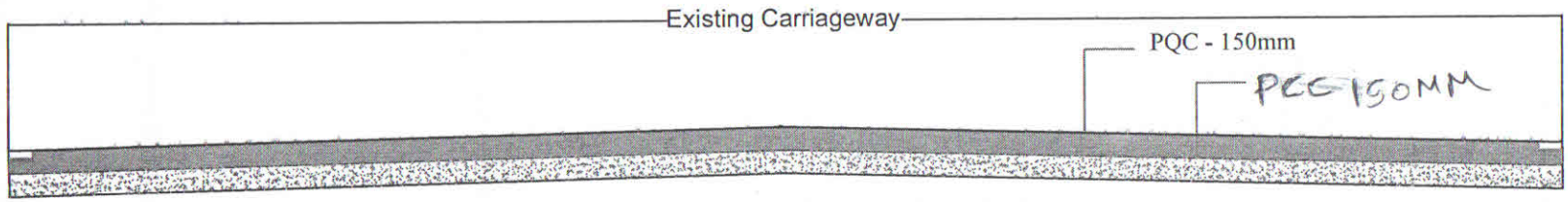
Technical Sanction
Accorded For ..99.00 Lakhs
Head of A/C..P..3727. SCSP/TSP
CER NO :...1/13..... Dt:28-10-2019

DRAWINGS



TYPICAL CROSS SECTION OF RCC DRAIN

AEE (VRP) SD

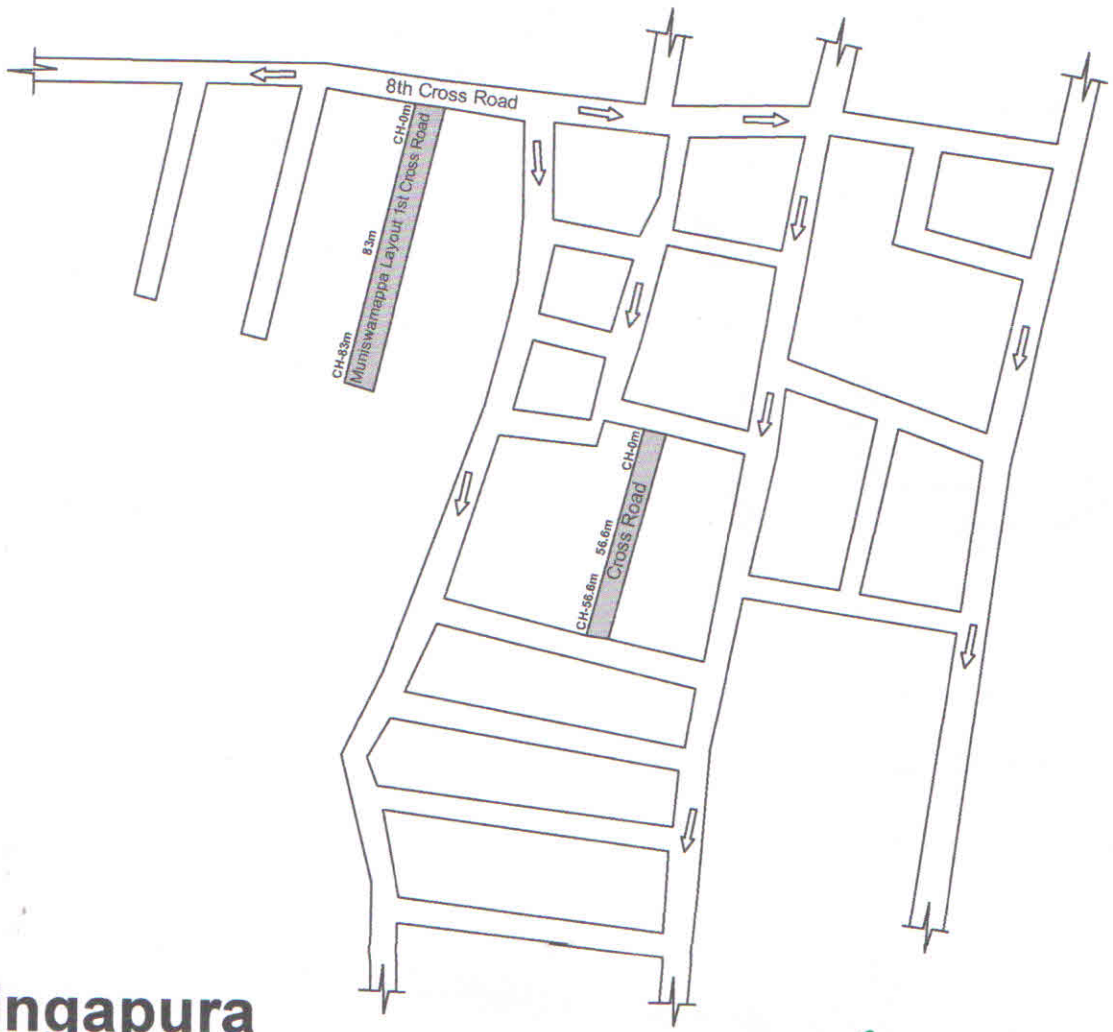


TYPICAL CROSS SECTION FOR CC ROAD

WARD MAP

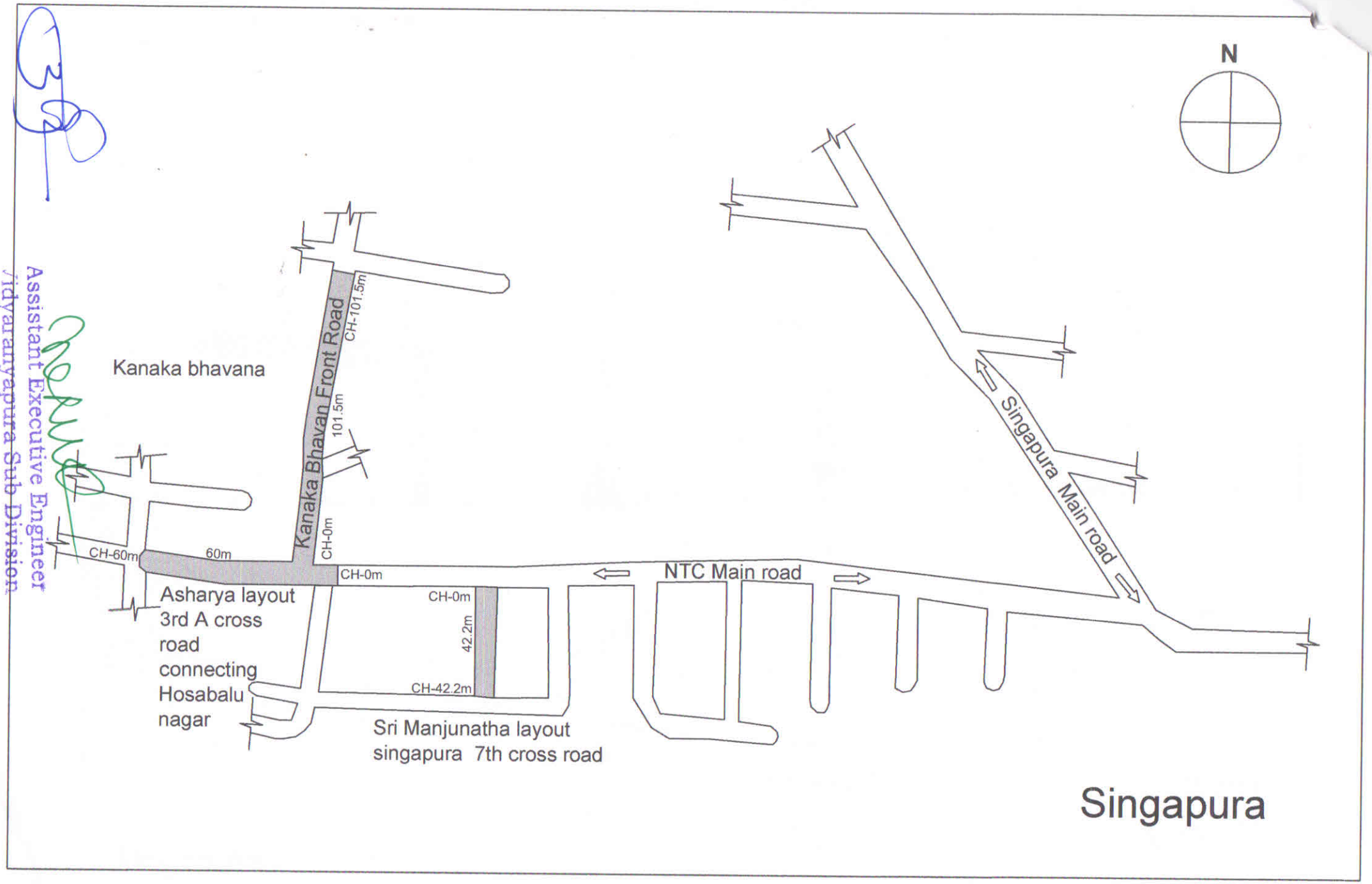
1st Stage Kuvempu Nagar

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97



Singapura

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97



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Vidyaranyapura Sub Division
BBMP, Bangalore - 97

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